

We claim:

1           1.     An object-oriented temporal context programming system comprising:  
2                 data objects, each data object defining a class of object with at least one attribute, said  
3                 attribute being stored in the database with an indication of the effective time of the attribute, any  
4                 change in attribute also being stored in the data object along with an indication of the time of effect  
5                 of the change in the attribute; and

6                 methods which the class can carry out, said methods having an argument which is  
7                 effective time, said method being stored in the database with an indication of the effective time of  
8                 the method, any change in said method also being stored in the data object along with an indication  
9                 of the time of effect of the change in the method, execution of said method with a particular time  
10                 argument utilizing the attributes of the effected data objects and the particular method in effect for  
11                 the particular time specified.

1           2.     An object-oriented temporal context programming system comprising:  
2                 data objects, each data object defining a class of object with at least one attribute, said  
3                 attribute being stored in the database with an indication of the effective time of the attribute, any  
4                 change in attribute also being stored in the data object along with an indication of the time of effect  
5                 of the change in the attribute; and

6                 methods which the class can carry out, said methods having an argument which is  
7                 effective time, execution of said method with a particular time argument utilizing the attributes of  
8                 the effected data objects in effect for the particular time specified.

1           3.     An object-oriented temporal context programming system comprising:  
2                 data objects, each data object defining a class of object with at least one attribute, said

attribute being stored in the database, any change in attribute also being stored in the data object ;  
and

methods which the class can carry out, said methods having an argument which is effective time, said method being stored in the database with an indication of the effective time of the method, any change in said method also being stored in the data object along with an indication of the time of effect of the change in the method, execution of said method with a particular time argument utilizing the particular method in effect for the particular time specified.

4. An object-oriented temporal context programming system comprising:  
data objects, each data object defining a class of object with attributes, at least one attribute of one data object being stored in the database with an indication of the context of the attribute, any change in attribute also being stored in the data object along with an indication of the context of the change in the attribute; and

methods which the class can carry out, at least one of said methods having an argument which is an indication of context, said method being stored in the database with an indication of the context of the method, any difference in said method also being stored in the data object along with an indication of the context of the difference in the method, a method executed with a particular context argument utilizing the attributes of the effected data objects and the method in effect for the particular context.

5. An object-oriented temporal context programming system as claimed in claim 2 wherein the context is a version of an application program, so that by identifying a particular context a different version of the application program runs and gives the user a different vantage point from which to experience the program.

1                   6.       An object-oriented temporal context programming system comprising:  
2                   data objects, each data object defining a class of object with attributes, at least one  
3                   attribute of one data object being stored in the database with an indication of the context of the  
4                   attribute, any change in attribute also being stored in the data object along with an indication of the  
5                   context of the change in the attribute; and  
6                   methods which the class can carry out, at least one of said methods having an  
7                   argument which an indication of context, a method executed with a particular context argument  
8                   utilizing the attributes of the effected data objects in effect for the particular context.

1                   7.       An object-oriented temporal context programming system comprising:  
2                   data objects each defining a class of object with attributes; and  
3                   methods which the class can carry out, at least one of said methods having an  
4                   argument which is an indication of context, said method being stored in the database with an  
5                   indication of the context of the method, any difference in said method also being stored in the data  
6                   object along with an indication of the context of the difference in the method, a method executed  
7                   with a particular context argument utilizing the method in effect for the particular context.